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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/439,740	11/15/1999	WALTER D. FUNK	UVI-005CP2CN	2036

959 7590 03/13/2002

LAHIVE & COCKFIELD
28 STATE STREET
BOSTON, MA 02109

EXAMINER

BUGAISKY, GABRIELE E

ART UNIT	PAPER NUMBER
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1653

DATE MAILED: 03/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/439,740

Applicant(s)

FUNK ET AL.

Examiner

Gabriele E. BUGAISKY

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-29, 32-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 32-37, 41-54 is/are allowed.
- 6) ☒ Claim(s) 27-29 and 55-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: *See Continuation Sheet*.

Continuation of Attachment(s) 6). Other: Additional copy of Woodworth, 1989 (of record).

DETAILED ACTION

Response to Amendment

The amendment of 12/01 is acknowledged. Claims 30-31 have been cancelled; claims 27-29 and 32-60 remain under consideration. The Examiner thanks Applicants for pointing out that the abstract sent with 1989 Woodward citation did not correspond. A new copy of the correct 1989 abstract has been supplied, and the correct citation of the 1990 Woodward abstract is supplied. The Examiner wished to point out that although Applicants are correct that the information of the 1990 abstract was not presented until the week of 24 February 1990, part C of the symposia abstracts (in which the abstract appears) was available as of 3 February 1990.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The copy of the declaration under 37 CFR 1.132 filed 12/27/2001 is sufficient to overcome the rejection of claims 27-30 and 55-60 based upon Funk *et al.*

The rejection of claims 27-30 and 55-60 under 35 U.S.C. 102(b) as being anticipated by Woodward *et al.* (1989) is withdrawn, based upon the amendment.

Claims 38-40 and 55-56 are rejected under 35 U.S.C. 102(b) as being anticipated by Woodward *et al.* (1990). The Examiner had inadvertently supplied the 1990 abstract with the

citation of a 1989 abstract by Woodworth et al. Although the conference did not occur until 24 February 1990, part C of the abstracts (in which the citation occurs) was available as of 3 February 1990; the reference thus indeed is considered to have been published more than one year before the priority date. The reference provides for expression of the amino terminal half of human serum transferrin by transformed eukaryotic cells, in the expression vector pNUT. A site directed mutant at D₆₃ is also disclosed and thus anticipates claims 38-40 and 55-56.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

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Claims 27-29 and 55-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman *et al.* in view of Woodworth *et al.* (1989). Bowman teaches the cloning of human serum transferrin, and differs from the instant invention in that expression of the cloned gene was not accomplished. The reference does point out (column 2, lines 45-52 and column 3, lines 41-52) that the gene can be placed into a eukaryotic expression vector. As was stated above, a copy of a different abstract accompanied the Woodworth citation. The 1989 citation (of which a copy of the correct abstract is now supplied) indeed supplies the information that was stated in the previous Action. Woodworth *et al.* provide for expression of the amino terminal half of human serum transferrin by transformed eukaryotic cells, but do not provide for the expression of full-length transferrin. In order to express full length transferrin or the carboxyl terminus of the transferrin gene of Bowman *et al.*, it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized the expression system of Woodward *et al.* with a reasonable expectation of success in obtaining eukaryotic expression of recombinant human serum transferrin free from any other human proteins. As was stated above, a copy of a different abstract accompanied the citation. The 1989 citation (of which a copy of the correct abstract is now supplied) indeed supplies the information that was stated in the previous Action.

Conclusion

Claims 32-37 and 41-54 remain allowed.

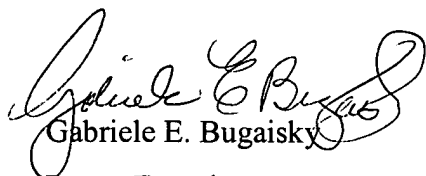
Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Gabriele E. Bugaisky, Ph.D. whose telephone number is (703) 308-4201. The Examiner can normally be reached from 8:15 AM to 12:15 PM on Mondays and from 8:15 AM to 1:15 PM on other weekdays.

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If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Christopher S. F. Low, can be reached at (703) 308-2923.

Papers related to this application may be submitted by facsimile transmission. Papers should be faxed to Technology Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Fax Center number is (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0196.



Gabriele E. Bugaisky

Patent Examiner

March 11, 2003

GABRIELLE BUGAISKY
PATENT EXAMINER